ABSTRACT

A mechanically deployable, expandable and collapsible structure is provided. The structure includes at least one scissor assembly made up of a first and a second strut, a first spacer disposed between the first end of the first strut and the first end of the second strut when the scissor assembly is in the expanded position, and a second spacer disposed between the second end of the first strut and the second end of the second strut when the scissor assembly is in the expanded position. A tension member is connected to the first and second struts. The tension member is arranged such that the scissor assembly is moved from the folded position when there is slack in the tension member to the expanded position when the slack in the tension member is taken up.